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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,800	03/07/2001	Hiroto Yoshioka	55661(904)	9944
21874	7590	08/04/2003		L 5
EDWARDS & ANGELL, LLP P.O. BOX 9169 BOSTON, MA 02209			EXAMINER	
			CHIN, RANDALL E	
		ART UNIT	PAPER NUMBER	
			1744	

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/800,800	YOSHIOKA ET AL.
	Examiner Randall Chin	Art Unit 1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 03 July 2003 .

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-35 is/are pending in the application.  
4a) Of the above claim(s) 13-35 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-12 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13 .  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Election/Restrictions***

1. This is not found persuasive because Applicant has not traversed on the ground that the species of Figs. 1 and 2 are not patentably distinct. Note that if claim 1 is allowed, then claims 13-15 would also be allowed.

Upon reconsideration, claims 2 and 8 will be examined as readable on elected Fig.1. However, the scope of claim 2 is indefinite in the sense that "the aqueous cleaning agent" has already been recited back in claim 1 as coming from the ultrasonic wave projection means. See reference numeral 12 in Fig.1 and specification at p.20, lines 16-20. If there is additional aqueous cleaning agent 11 (Fig.1) sprayed onto the substrate, claim 2 should accurately reflect this and not be confused with the "aqueous cleaning agent" recited in claim 1.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 11, 4, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 06-005577 (hereinafter the Japan reference).

The Japan reference teaches ultrasonic wave projection means for supplying an aqueous cleaning agent against the surface of the object to be cleaned and generating an ultrasonic wave defined by nozzle in the bottom of the tank 1 in conjunction with

ultrasonic wave oscillator 7 shown in Fig.1.. Clearly, substrate 12 is set between the scrubbing means 6 and the ultrasonic wave projection means. The fact that the Japan reference may teach a submerged substrate in a vessel does not overcome the present rejection. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The fact that the substrate may remain submerged in the aqueous cleaning agent while being scrubbed or that floating and/or suspended particles can be re-deposited on the submerged substrate as set forth by the Japan reference, claim 1 only requires that there be ultrasonic wave projection means for supplying an aqueous cleaning agent against the surface of the object to be cleaned and generating an ultrasonic wave. The Japan reference does this.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 06-005577.

As for claim 5, it is the Examiner's position that whether the cleaning brush is a disk brush or roll brush is an obvious design matter to one of ordinary skill in the art and may depend on desired cleaning characteristics of the substrate or for pure economical

reasons. For similar reasons, the use of transport rollers or belt conveyor as recited by claim 12 is another design choice which may depend on design characteristics or economic reasons. Whether the substrate is transported by rollers or belt conveyor is not deemed to define patentable subject matter.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 8, 3, 4, 6, 7, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka '075.

Tanaka '075 teaches all of the recited subject matter as shown by Fig.6, for example. A megasonic nozzle 26 (which would spray ultrasonic fluid at megasonic frequency) is opposed to a scrubbing means 23 with an object to be cleaned set therebetween. As for claims 2 and 8, there is further cleaning agent supplied at 22 in a radial direction. As for claim 3, transport means could be the main arm mechanism 5 (Fig.5). As for claims 4 and 6, brushing section 29 is deemed to be a cleaning brush in disk-shaped form. Claims 10 and 11 appear similar in form.

### ***Conclusion***

7. Applicant's arguments filed 7/3/03 have been fully considered but they are not persuasive. Applicant's arguments concerning the Japan reference have been addressed by the above art rejections.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (703) 308-1613. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Randall Chin  
Primary Examiner  
Art Unit 1744



R. Chin  
July 31, 2003